

REMARKS

Applicant respectfully requests reconsideration of the instant application on the basis of newly amended Claims 1 and 13. Claims 1 and 13 are the main claims and the remaining claims are directly or indirectly dependent upon those.

The Examiner has rejected the claims as being unpatentable over U.S. Patent No. 2,508,659 by Brown (*Brown*) in view of U.S. Patent No. 2,481,152 by Redmond (*Redmond*), U.S. Patent No. 5,868,858 by Creed (*Creed*), Applicant's Specification and others. It is believed that Claims 1 to 16 are clearly distinguishable over these references for the reasons that will be set forth.

Support for the amendment of Claims 1 and 13 is found in Figures 1 and 2 and the specification, paragraphs [0040] to [0044] and others. M.P.E.P. § 608.04 states that "the applicant may rely not only on the specification and drawing" to establish a disclosure.

As stated previously the *Brown* reference describes a known type of cleaning kite that is useful for sewer systems or other tubular systems having a comparatively smaller interior diameter. A conical member **15** *made of a flexible material* is internally unsupported between the two ends since the ribs **14** extended "over" the canvas material. Note that for the device of *Brown* to function, the cleaning plug **P** is seated in the end of the sewer pipe **S** where it connects to the wall **M** of the manhole." (col. 2, lines 46-48)

The *Redmond* reference describes a pipe cleaning apparatus having a **single** apertured *metal* nozzle **9** that attaches to the end of structurally unsupported resilient section **6c**. It is similarly critical to understand that the device of *Redmond* also must be in contact with the interior walls of the passageway.

At this time the device is released by loosening of the cable **14** and the device slips inwardly into the pipe or sewer, where the friction of the resilient head or

section **6a** against the inner walls of the pipe or sewer serves again to hold it for further and repeated cleaning operations. The same procedure is repeated until the entire pipe or sewer is cleaned. (col. 4, lines 23-30)

Figure 7 of *Creed* teaches a known air emitting nozzle or skip ball with a plurality of outwardly diverging outlet passages. *See* col. 6, lines 1 - 17. Such skip ball is used to "control the downstream movement of the parachute member **62**. *See* col. 5, lines 62 - 67. The parachute of *Creed* is light enough to bounce from wall to wall in the interior of the air duct. *See* col. 6, line 64 to col. 7, line 20.

35 U.S.C. § 103 Grounds for Rejection

The Examiner rejected the Claims under 35 U.S.C. § 103(a) as being unpatentable over *Brown, Redmond* and the other references. Applicant respectfully traverses these rejections for the reasons discussed below.

Applicant's invention is directed toward solving the disadvantage that prior cleaning kites or plugs were for comparatively small diameter pipes that had to be fully filled with the flowing liquid before the cleaning plugs would properly function. Prior to the present invention the prior art devices would cause turbulence upstream of the plug due to the stoppage of the fluid filling the pipe. Additionally, the pipe had to be flooded with extra fluid for the prior art devices in the event that there was insufficient filling of the pipe.

Independent Claim 1, as amended, recites the following elements, the most pertinent to this discussion being presented in bold type for the convenience of the Examiner:

1. (Currently Amended) A large scale cleaning plug adaptable to be placed within an interior passageway of **a tubular system having a large diameter interior passageway for containing a fluid that may only partially fill the interior of the tubular system**, the plug comprising:

a generally conically shaped element having a first end and an opposite second end; said first end and said second end **having a width selected to fit within the interior passageway of the tubular system; the first end having a width less than the diameter of the interior passageway of the tubular system**;

securing means connected to the conical element in proximity to the first end for controllably securing the conical element in desired positions within the interior passageway; and,

a nozzle assembly mounted with the second end of the conical element; said nozzle assembly having a plurality of nozzle bodies extending from a plate preventing appreciable fluid flow therethrough as the fluid flows relative to the first end of the conical element and toward the second end and permitting a desired fluid flow of the tubular system fluid through an exit opening of the nozzle bodies;

whereby sediment deposits located in the interior passageway in a direction of the fluid flow after the cleaning plug may be stirred without fully flooding the interior passageway of the tubular system ahead of the first end of the cleaning plug.

The Examiner's rejection in essence is one of obviousness, and on this point it is believed that the decision in Lerner v. Child Guidance Products, Inc., 193 U.S.P.Q. 329, 330 (2d Cir. 1976) is on point. This case held that obviousness does not turn on subjective considerations. However, the question is not whether the subject matter of the claim was obvious to the

Examiner, the Board of Appeals, or the court, but whether it would have been obvious to one of ordinary skill in the specific art.

Reconsideration of this proposed combination is respectfully requested because there would be no reason to combine *Brown* with *Redmond* or others in this manner since each device is complete and functional in itself and since the devices themselves fail to suggest any such combination or that there would be any advantages in combining their teachings when applied to larger interior diameter pipes that are not fully filled with the fluid. As was stated in In re Sernaker, 217 U.S.P.Q. 1, 6 (CAFC 1983),

“[P]rior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings.”

As was further stated in Orthopedic Equipment Co., Inc. v. United States, 217 U.S.P.Q. 193, 199 (CAFC 1983),

“It is wrong to use the patent in suit [here the patent application] as a guide through the maze of prior art references, combining the right references in the right way to achieve the result of the claims in suit [here the claims in issue]. Monday morning quarterbacking is quite improper when resolving the question of obviousness in a court of law [here the PTO].”

Moreover, even if the *Brown* and *Redmond* references could be properly combined, the resultant combination would not anticipate the present invention, as claimed. Even if *Brown* and *Redmond* were combined, the resultant cleaning plug would have limited success functioning within a large inner diameter pipe. There is no teaching, showing, or any suggestion whatever, in either *Brown* or *Redmond*, of the novel concept and arrangement of Applicant's invention, i.e., “having a width selected to fit within the interior passageway of the tubular system; the first end having a width less than the diameter of the interior passageway of the tubular system.”

Accordingly the rejection of the claims on *Brown* and *Redmond* is submitted to have been improper. Even more so now, this rejection as applied to amended claims 1 and 13 and their dependent claims is respectfully submitted to be improper and reconsideration and withdrawal are respectfully requested.

In order to establish a prima facie case of obviousness, the prior art teachings must be sufficient to suggest making the substitution or modification necessary to make the claimed invention to one of ordinary skill in the art, In re Lulu, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1984), in the absence of applicant's own disclosure. See also, In re Laskowski, 871 F.2d 115, 117, 10 USPQ2d 1397, 1398-99 (Fed. Cir. 1989) and Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985). The motivation to make a specific structure

“is not abstract, but practical, and is always related to the properties or uses one skilled in the art would expect the [structure] to have, if made.”

In re Gyurik, 596 F.2d 1012, 1018, 201 USPQ 552, 557 (CCPA 1979). See also Fromson v. Advance Offset Plate, Inc., 755 F.2d 1549, 1556, 225 USPQ 26, 31 (Fed. Cir. 1985)(“Critical inquiry is whether ‘there is something in the prior art as a whole to suggest the desirability, and, thus, the obviousness, of making the combination’”).

There must have been a reason apparent at the time the invention was made to a person of ordinary skill in the art for applying the teachings at hand to effect the modification necessary to reach the claimed invention in the manner proposed or the use of the teaching as evidence of obviousness will entail prohibited hindsight. Graham v. John Deere of Kansas City, 383 U.S. 1, 148 USPQ 459 (1966), and In re Nomiya, 509 F.2d 566, 184 USPQ 607 (CCPA 1975).

Here there is lacking the requisite suggestion in these prior art disclosures that would have motivated the artisan to do what the Examiner has characterized as being an obvious combination. Both of the *Brown* and *Redmond* devices work only when the interior of the pipe to be cleaned is fully flooded with the fluid and when the prior cleaning plugs are in contact with the interior walls of the pipe; therefore, providing only limited, if any, utility for large diameter sewer pipes.

Additionally, the fluid dynamics within a larger diameter pipe are substantially different from smaller interior diameter pipes since the fluid pressure decreases with the increase in cross sectional area of the pipe's passageway with other variables being held constant.

It should also be noted that the *Brown* reference has been available since May 23, 1950 and the *Redmond* reference has been available since September 6, 1949. Between 1950 and the present, no one except Applicant has constructed a large scale cleaning plug device without the disadvantages discussed above and which are clearly set forth on the first few pages of Applicant's specification. It is certainly believed to be pertinent that no-one has achieved or anticipated Applicant's structure despite the availability of the references for such a long time.

Dependent Claims 2-13 that depend from independent Claim 1 and Dependent Claims 14-16 that depend from independent Claim 13 are also not made obvious by *Brown* in view of *Redmond* because they include the limitations of Claim 1 or 13 and add additional elements that further distinguish the art. Therefore, Applicant respectfully requests that Claims 1-6 be allowed.

Conclusion

Applicant has now made an earnest attempt to place this case in condition for allowance. In light of the amendments and remarks set forth above, Applicant respectfully requests reconsideration and allowance of Claims 1-16.

If there are matters which can be discussed by telephone to further the prosecution of this Application, Applicant invites the Examiner to call the attorney at the number listed below at the Examiner's convenience.

Respectfully submitted,

A handwritten signature in black ink, reading "Thomas F. Marsteller, Jr." in a cursive script.

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ATTACHMENT A

LISTING OF CLAIMS WITH MARKINGS TO SHOW CHANGES MADE